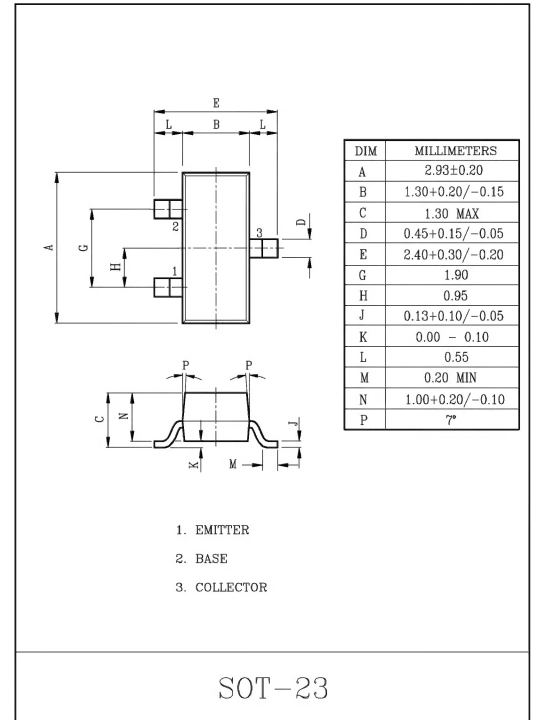


GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

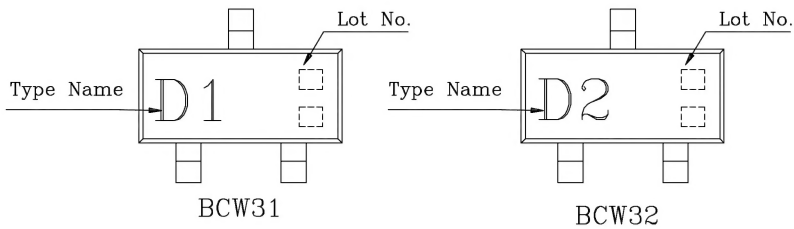
MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	30	V
Collector-Emitter Voltage	$V_{CEO}$	20	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	100	mA
Collector Power Dissipation	$P_C$ *	350	mW
Junction Temperature	$T_j$	150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	$-55\sim 150$	$^{\circ}\text{C}$

$P_C$ \*:Package Mounted On 99.5% Alumina  $10\times 8\times 0.6\text{mm}$ .



Marking



# BCW31/32

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage		$V_{CBO}$	$I_C=10\mu A$	30	-	-	V
Collector-Emitter Breakdown Voltage		$V_{CEO}$	$I_C=2mA$	20	-	-	V
Emitter-Base Breakdown Voltage		$V_{EBO}$	$I_E=10\mu A$	5	-	-	V
Collector Cut-off Current		$I_{CBO}$	$V_{CB}=30V$	-	-	100	nA
Emitter Cut-off Current		$I_{EBO}$	$V_{EB}=5V$	-	-	100	nA
DC Current Gain	BCW31	$h_{FE}$	$V_{CE}=5V, I_C=2mA$	110	-	220	
	BCW32			200	-	450	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=10mA, I_B=0.5mA$	-	-	0.25	V
Base-Emitter On Voltage		$V_{BE(ON)}$	$V_{CE}=5V, I_C=2mA$	0.55	-	0.7	V
Collector Output Capacitance		$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	-	4	pF
Noise Figure		NF	$V_{CE}=5V, I_C=0.2mA$ $R_S=2k\Omega, f=1kHz$	-	-	10	dB